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(54) Title: LED SYSTEM FOR PRODUCING LIGHT

(57) Abstract: The invention relates to a system comprising a plurality of light emitting diodes, LEDs. The LEDs may be controlled in various in various manners in order to obtain any of one or more objects of the system. Thus, LEDs may be controlled for by controlling at least two of the following parameters: the luminous intensity of each of the LEDs, the luminous flux of each of the LEDs, the colour spectrum of the light being emitted from each of the LEDs, the spatial radiation pattern of the light being emitted from each of the LEDs, the spatial radiation pattern of the system, the junction temperature of each of the LEDs, the temperature of the surroundings to the LED, the amperage of the electrical power being supplied each or sections of the LEDs, the voltage of the electrical power being applied the LEDs and pulsing applied to the electrical power being applied each or sections of the LEDs.

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